



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,138	02/05/2004	Timothy J. Crist	2973-A-30	5080
7590 08/09/2005				
Cahill, von Hellens & Glazer P.L.C. Ste. 155 2141 E. Highland Avenue Phoenix, AZ 85016			EXAMINER TANG, SON M	
			ART UNIT 2632	PAPER NUMBER

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/773,138

Applicant(s)

CRIST ET AL.

Examiner

Son M. Tang

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17-24 and 26 is/are rejected.
- 7) ☒ Claim(s) 16 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/5/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lalor [US 5,983,551].

Regarding claim 1: Lalor discloses a remotely controlled animal training device, comprising:

-a receiving circuitry (172) Fig. 10, for receiving control information signals including address information met by (transmit code and location code 365, 366) and function information codes (355, 375) from a remote 350 Fig. 12;

-a microcontroller 171 coupled to receive demodulated address codes and function codes from the receiving circuit 172;

-a set switch met by a transmit code selector (176) for setting the remotely controlled animal training device to recognize only an address code received from a particular remote transmitter [col. 10, lines 49-52 and col. 9, lines 28-30];

-a first stored routine executed by the microcontroller for operating on an address code (transmit code, location code) received from the remote transmitter in response to actuation of the set switch (transmit code selector 176); a second stored routine executed by the microcontroller for operating on a function code such as (fire code, sound code and gunner

Art Unit: 2632

code), Labor does not specifically disclose an operation step that comparing the address code to the stored address code which to determined if the remotely controlled animal training device is being addressed by the particular remote transmitter. Since, the address code met by (transmit code and location code) is being selected to correspond to the transmitted codes from the remote transmitter. It would have been obvious of one having ordinary skilled in the art that, the received codes must be compared to the selected codes in order to determine that the code is matched.

Regarding claim 2: Lalor discloses all the limitations as described above, except for specifically disclose a sufficient number of bits to essentially eliminate the possible of accidental actuation of any of a first predetermined number of remotely controlled animal training devices in a training area by any of a second predetermined number of remote transmitter in the training area. Since, Lalor has stated that the transmit codes is capable of preventing any interfering with one another in the same geographic location [col. 13, lines 53-56], therefore it would have been obvious of one having ordinary skill in the art to recognize that each transmit code signal from the remote control transmits to a particular receiver that contains a distinction bits for preventing accidental actuation of any transmit from other group of trainer.

Regarding claim 3: As described in claim 1 above, wherein the transmit code and function code are received from the particular remote transmitter in response to the actuation of the set switch (met by the selector 176), therefore it is obvious that the microcontroller stores the function code received from the transmitter prior to execute the code.

Regarding claim 4: As described in claim 1 above, Lalor further discloses various sound algorithms stored in the microcontroller which executed by the corresponding

Art Unit: 2632

sound codes signal received by the transmitter and produce audio signals by an acoustic transducer (piezo speaker) [see Fig. 10, 15-16, col. 9, 55-60 and col. 15, lines 35-40].

3. Claims **5-9, 13-15, 17-20 and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lalor in view of Sasaki et al. [US 6,315,601; Sasaki].

Regarding claims 5-7 and 9: Lalor discloses a remotely controlled device for controlling a remotely animal training device comprising:

- a receiving circuitry 172 for receiving control information signals from remote transmitter 150;

- a controller 171 coupled to receive demodulated information (inherent) from the receiving circuitry and adapted to generate a control signal in response to the demodulated information;

- a coupling device for coupling the control signal to a control input of the animal training device is inherently included in the system, because the signal receiver is a separate unit from an animal training device, which needs a connector to transmit signal from the receiver to the device.

- an acoustic transducer 175 [col. 9, lines 50-60]. Lalor does not specifically disclose that the coupling device has a test circuit responsive to a test switch for testing continuity of the coupling. Sasaki et al. teach an electrical connector 1, which comprises a pair of a continuity detecting switches 40 and 41 of [Fig. 4 or 81 of Fig. 7 as cited in col. 2, lines 10-46] and a test circuit is inherently in the continuity-testing member 78 for determining continuity. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention, to

Art Unit: 2632

implement a continuity testing member in an electrical connector as taught by Sasaki et al. in the coupling device of Lalor to insure that the coupling is completely connected, so user easily to identify which part of the device malfunction.

Regarding claim 8: Lalor and Sasaki disclose all the limitations as described above, Sasaki further teaches that the continuity test switches are at the connector [Fig. 7] that uses to connect to the device. Therefore, it is obvious that the test switch is included in the remotely device.

Regarding claim 13: Lalor and Sasaki disclose all the limitations as described above, the claimed “means for attaching the remotely controlled animal training device to one of the first and second launching devices” is inherently included in the remotely launching device 10, in order to specify the location of each training device corresponding to each launching device.

Regarding to claim 14: Lalor and Sasaki disclose all the limitations as described above, Labor further discloses wherein the acoustic transducer includes a piezoelectric device [col. 13, lines 30-41].

Regarding claim 15: Lalor and Sasaki disclose all the limitations as described above, Lalor further discloses a set switch met by a transmit code selector (176) for setting the remotely controlled animal training device to recognize only an address code received from a particular remote transmitter [col. 10, lines 49-52 and col. 9, lines 28-30].

Regarding claims 17-18: Lalor and Sasaki disclose all the limitations as described above, Lalor further discloses that the control information includes address information (transmit code and location code 176, 177) and function information (179, 180 and 175) are stored and executed by the microcontroller [as shown in Fig. 10].

Art Unit: 2632

Regarding claim 19: Refer to the consideration of claim 2 above.

Regarding claims 20 and 24: The claimed method steps are interpreted and rejected as rejection stated above.

4. Claims 10-12, 21-23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lalor in view of Sasaki et al. ^{as} in claim 9 ^{and 20} above, and further in view of Mattisson et al. [US 6,104,238; Mattisson].

TM
8-8-05

Regarding claim 10: Lalor and Sasaki disclose all the limitations as described above, except for not specifically show the receiving circuit includes an intermediate frequency (IF) circuit and a data slicer circuit for demodulating receiving frequency signals, Mattisson teaches a FM demodulator comprising an intermediate frequency 10 and a data slicer 16 for providing a demodulated output signal [see Fig. 2, col. 2, lines 40-52]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention, to implement a demodulator circuit that uses an intermediate frequency and slicer as taught by Mattisson into the system of combination above, in order to obtain a better and clear signal by filtering out noise and distortion.

Regarding claim 11: Mattisson further teaches that the demodulator circuit further includes a predetermined reference voltage F_REF (19) and applies it to a reference input of the data slicer circuit [see Fig. 2, col. 3, lines 5-16 and col. 4, lines 1-3].

Regarding claim 12: Mattisson taught all the limitations as described above, except for not specifically that a coupling capacitor coupling the signals to an input of the data slicer circuit. Examiner taken Official Notice that a coupling capacitor for coupling demodulated and sliced

Art Unit: 2632

control information signals to an input of the data slicer circuit is known in the communication demodulator art.

Regarding claims 21-23 and 26: The claimed method steps are interpreted and rejected as rejection stated above.

Allowable Subject Matter

5. Claims 16 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kim et al. [US 6,598,563] teach an address setting switch (123), Duncan et al. [US 6,170,439] teach (IF) and Slicer circuit, So [US 5,666,908], Brose [US 4,898,120], Cana et al. [US 6,249,552], So [US 6,487,991], and Cullen et al. [US 6,347,476].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son M. Tang whose telephone number is (571)272-2962. The examiner can normally be reached on 4/9 First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571)272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2632

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Son Tang

A handwritten signature in black ink, reading "Thomas J. Mullen, Jr.", with a stylized, cursive script.

Thomas J. Mullen, Jr.
Primary Examiner
Art Unit 2632